



Ecodesign Lot 1 and TC109

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TC 109 Plenary

WG1 central heating

2 - Are the standards already updated? YES!



- **One generic standard 15502 including energy use**
- **Energy in:(gas- Electric) 100% load, 30% load, stand-by**
- **Energy out: heat 100% load, 30% load**
- **NOx**

2 - Are the standards already updated? NO!



- **No annex ZA as the mandate is not specified yet**
- **Its a basically a Product (safety) standard :**
 - Focus test condition
 - Test value. And accuracy of test instrument
- **Its not a LAB standard on performance measurement:**
 - How to measure
 - How to determine accuracy , repeatability, impact test conditions
 - ring test procedures, line checks .
- **Only covers the “hard side”**
 - Data to be measured on the product
- **Does not cover the “soft side”**
 - Annual energy use related to: the building, consumer behavior, political opinions.

What does TC 109 need to move ahead?



A fixed mandate (no moving target) on:

- **The data to be measured (definitions)**
- **A What seems to be missing list.**
- **Condition specification or true value?**

For the moment TC 109 sees no added value in :

- **Copying legally required calculation schemes (That are political sound but not necessarily technical sound)**

Condition specification or true value?



Condition specification:

- **Boundaries for test conditions (it's ok if it is within the limits of the condition)**
- **Low repeatability, not too expensive. The standard is ready for most issues**

True value:

- **One test condition! (If the actual condition deviates from the specified condition a correction must be used)**
- **High repeatability, but expensive. A lot of work to be done still.**

Example test conditions



- T ambient 20 \pm 5 degrees
- Humidity 50% \pm 20%
- Ambient pressure 1015 hPa \pm 50 hPa
- Water temperature 30 \pm 2 degrees.

What are the best results?

- A) The conditions that give the best performance?
- B) The conditions closest to the set value?

Specification measurements:



Full load:

- Accuracy 2%
- Specification conditions (yes)
- Impact conditions: ?
- Line checks:?
- Ring test requirements: ?
- Repeatability : ?

Part load:

- Accuracy ? (Use same equipment)

The road ahead depends on:



- **Third party testing or self testing**
- **Marked surveillance?**
- **How will courts deal with:**
 - **Test conditions**
 - **accuracy**